

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Date of Report: 02/12/99

Date Received: 02/04/99

Project: Metro Self Monitor, PO# M78287

Date Samples Extracted: 02/08/99

Date Extracts Analyzed: 02/11/99

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE  
FOR CHROMIUM, COPPER, NICKEL, ZINC  
USING METHOD 6010**

**Samples Processed Using Method 3005A**

Results Reported as mg/L (ppm)

<u>Sample ID</u>	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M78287	0.32	0.43	0.45	<0.05
Method Blank	<0.05	<0.05	<0.05	<0.05

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 02/12/99

Date Received: 02/04/99

Project: Metro Self Monitor, PO# M78287

### QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 901130-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.62	0.61	2	0-20
Copper	mg/L (ppm)	0.68	0.70	3	0-20
Nickel	mg/L (ppm)	0.72	0.71	1	0-20
Zinc	mg/L (ppm)	0.06	0.09	40a	0-20

Laboratory Code: 901130-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recovery MS	% Recovery MSD	Acceptance Criteria	RPD
Chromium	mg/L (ppm)	5	0.62	97	99	80-120	2
Copper	mg/L (ppm)	5	0.68	100	100	80-120	0
Nickel	mg/L (ppm)	10	0.72	98	99	80-120	1
Zinc	mg/L (ppm)	5	0.06	102	105	80-120	3

Laboratory Code: Laboratory Control Sample


Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD
Chromium	mg/L (ppm)	5	107	108	80-120	1
Copper	mg/L (ppm)	5	109	109	80-120	0
Nickel	mg/L (ppm)	10	109	109	80-120	0
Zinc	mg/L (ppm)	5	111	109	80-120	2

a - The analyte was detected at a level less than five times the detection limit. The RPD results may not provide reliable information on the variability of the analysis.

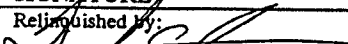
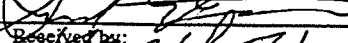
902016

mm 2.4.99 A.I.

Send Report To: Alaskan Copper Works  
Company 628 Alameda St. Contact Genard A. Thompson  
Address Seattle WA 98134  
City, State, Zip 206-382-8379  
Phone # 206-382-4309 FAX # 2-4-99 Date

SITE NO.		PROJECT NAME		PURCHASE ORDER #	
7238		metro Self monitor		M 78287	
SAMPLERS (signature)				PROJECT LOCATION	
				3200th Ave S.	
REMARKS				SAMPLE DISPOSAL INFORMATION	
				<input type="checkbox"/> Dispose after 30 days	
				<input checked="" type="checkbox"/> Return Samples	
				<input type="checkbox"/> Call for Instructions	

[illegible]

SIGNATURE		PRINT NAME	COMPANY	Date	Time
Relinquished by:		GERALD A. Thompson	ACW	2/4/99	12:53pm
Received by:		Hitoyuki Takai	F&B Inc.	2/4/99	12:55pm
Relinquished by:					
Received by:					

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D.  
Charlene Jensen, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
TEL: (206) 285-8282  
FAX: (206) 283-5044  
e-mail: fbi@isomedia.com

February 12, 1999

**DUPLICATE COPY**

**INVOICE #99ACU0212-1**

Accounts Payable  
Alaskan Copper Works  
628 South Hanford St.  
Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M78287: Results of testing requested  
by Gerry Thompson for material submitted on February 4, 1999.

1 water sample analyzed for  
Chromium, Copper, Nickel, and Zinc  
using Method 6010 @ \$80 per sample

\$ 80.00

Amount Due .....

\$ 80.00

FEDERAL TAX ID (b) (6)

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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3012 16th Avenue West  
Seattle, WA 98119-2029  
TEL: (206) 285-8282  
FAX: (206) 283-5044  
e-mail: fbi@isomedia.com

February 12, 1999

Gerry Thompson, Project Manager  
Alaskan Copper Works  
628 South Hanford St.  
Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on February 4, 1999 from your Metro Self Monitor, PO# M78287 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Manuel Marti  
Project Manager

Enclosures  
ACU0212R.DOC